Stress and Health

Chapter 11

SHOUT
SHARE
IT

Chapter 11 Learning Objective Menu

- LO 11.1 Stress
- LO 11.2 Cognitive factors in stress
- LO 11.3 Kinds of experiences causing stress
- LO 11.4 Sources of stress in everyday life
- LO 11.5 Suicide
- LO 11.6 Types of conflict
- LO 11.7 Bodily reaction to stress
- LO 11.8 Relationship between stress and the immune system
- LO 11.9 Relationship between stress and personality
- LO 11.10 Relationship between stress and social factors
- LO 11.11 Two ways to deal with stress
- LO 11.12 Psychological defense mechanisms
- LO 11.13 Meditation to relieve stress
- LO 11.14 Cultural influences on stress
- LO 11.15 How being religious helps to cope with stress
- LO 11.16 Ways to promote wellness in one's life

Stress

- Stress - the term used to describe the physical, emotional, cognitive, and behavioral responses to events that are appraised as threatening or challenging.
- Stressors - events that cause a stress reaction.
- Distress - the effect of unpleasant and undesirable stressors.
- Eustress - the effect of positive events, or the optimal amount of stress that people need to promote health and well-being.

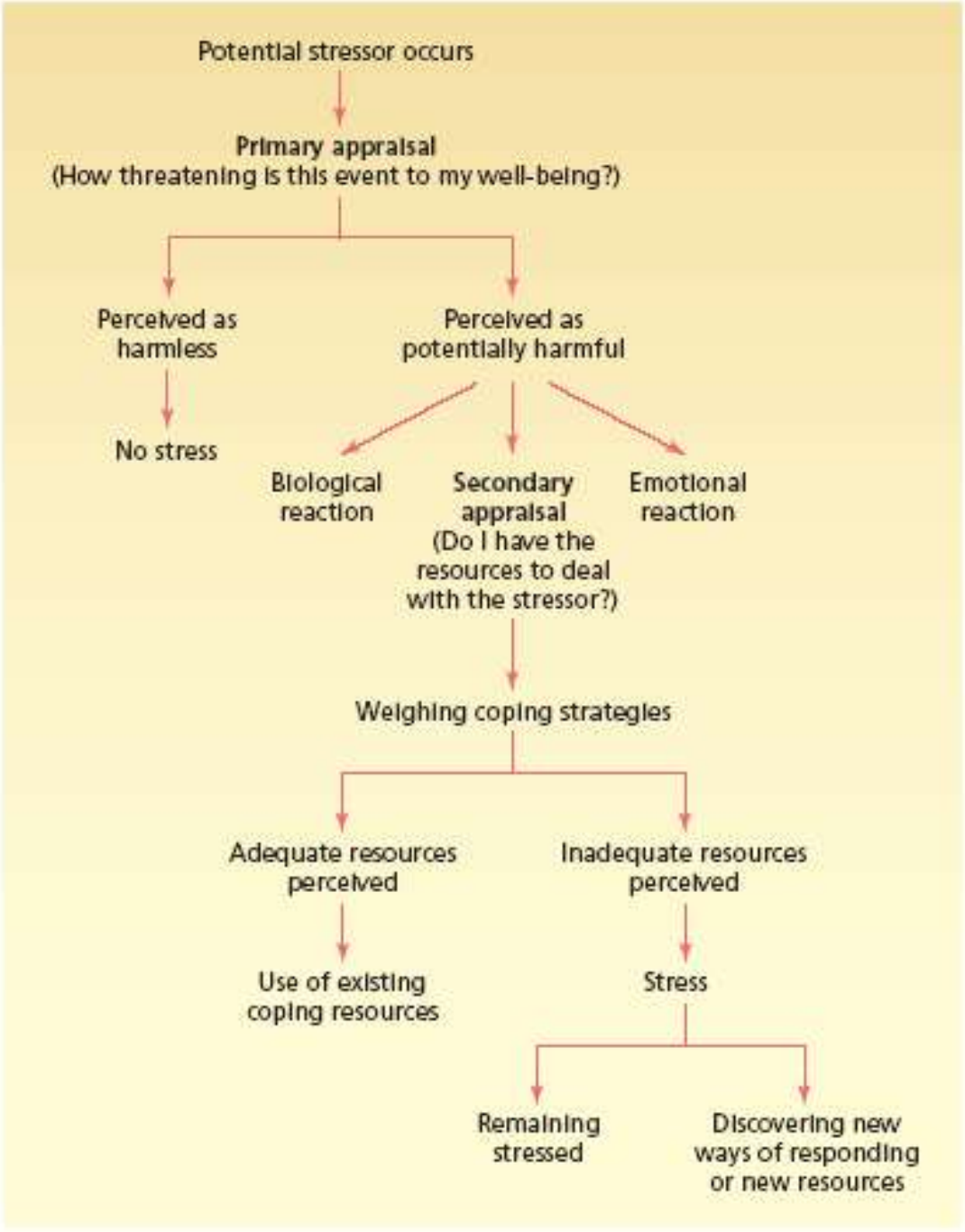
Menu

Cognitive Factors of Stress

- Cognitive appraisal approach - states that how people think about a stressor determines, at least in part, how stressful that stressor will become.
  - Primary appraisal - the first step in assessing a stress, which involves estimating the severity of a stressor and classifying it as either a threat or a challenge.
  - Secondary appraisal - the second step in assessing a threat, which involves estimating the resources available to the person for coping with the stressor.

Menu

FIGURE 11.1 **Responses to a Stressor** Lazarus's Cognitive Appraisal Approach. According to this approach, there are two steps in cognitively determining the degree of stress created by a potential stressor. Primary appraisal involves determining if the potential stressor is a threat. If it is perceived as a threat, secondary appraisal occurs in addition to the bodily and emotional reactions. Secondary appraisal involves determining the resources one has to deal with the stress, such as time, money, physical ability, and so on. Inadequate resources lead to increased feelings of stress and the possibility of developing new resources to deal with the stress.



LO 11.2
Cognitive factors in stress

Menu

Causes of Stress

- Catastrophe - an unpredictable, large-scale event that creates a tremendous need to adapt and adjust as well as overwhelming feelings of threat.
  - Post-Traumatic Stress Disorder (PTSD) - a disorder resulting from exposure to a major stressor, with symptoms of anxiety, nightmares, poor sleep, reliving the event, and concentration problems, lasting for more than one month.

Menu

Causes of Stress

- Major Life Events - cause stress by requiring adjustment.
  - Social Readjustment Rating Scale (SRRS) - assessment that measures the amount of stress in a person's life over a one-year period resulting from major life events.
  - College Undergraduate Stress Scale (CUSS) - assessment that measures the amount of stress in a college student's life over a one-year period resulting from major life events.
- Hassles - the daily annoyances of everyday life.

Menu

LO 11.3 Kinds of experiences causing stress

TABLE 11.1 SAMPLE ITEMS FROM THE SOCIAL READJUSTMENT RATING SCALE (SRRS)

Major Life Event	Life Change Units
Death of spouse	100
Divorce	75
Marital separation	65
Jail term	63
Death of a close family member	63
Personal injury or illness	53
Marriage	50
Dismissal from work	47
Marital reconciliation	45
Pregnancy	40
Death of close friend	37
Change to different line of work	36
Change in number of arguments with spouse	36
Major mortgage	31
Foreclosure of mortgage or loan	30
Begin or end school	26
Change in living conditions	25
Change in work hours or conditions	20
Change in residence/schools/recreation	19
Change in social activities	18
Small mortgage or loan	17
Vacation	13
Christmas	12
Minor violations of the law	11

Menu

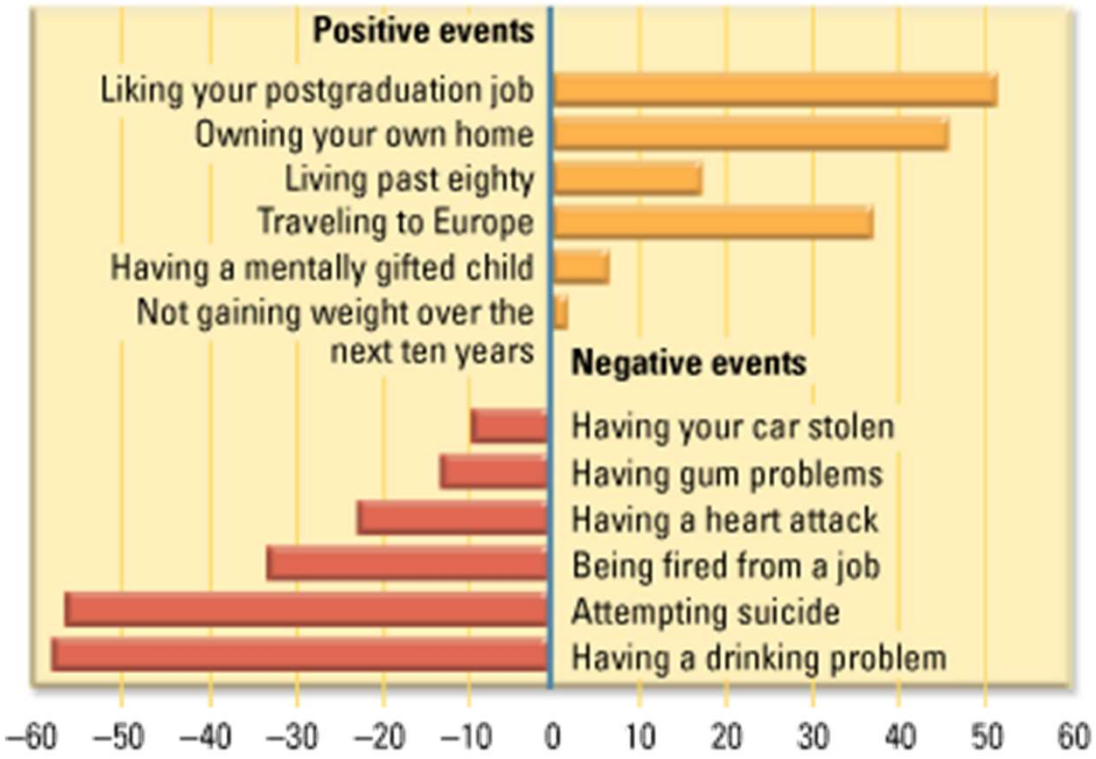
LO 11.3 Kinds of experiences causing stress

TABLE 11.2 COLLEGE UNDERGRADUATE STRESS SCALE (CUSS)

Event	Rating
Being raped	100
Finding out that you are HIV-positive	100
Death of a close friend	97
Contracting a sexually transmitted disease (other than AIDS)	94
Concerns about being pregnant	91
Finals week	90
Oversleeping for an exam	89
Flunking a class	89
Having a boyfriend or girlfriend cheat on you	85
Financial difficulties	84
Writing a major term paper	83
Being caught cheating on a test	83
Two exams in one day	80
Getting married	76
Difficulties with parents	73
Talking in front of a class	72
Difficulties with a roommate	66
Job changes (applying, new job, work hassles)	65
A class you hate	62
Confrontations with professors	60
Maintaining a steady dating relationship	55
Commuting to campus or work, or both	54
Peer pressures	53
Being away from home for the first time	53
Getting straight A's	51
Fraternity or sorority rush	47
Falling asleep in class	40

Menu

LO 11.3 Kinds of experiences causing stress



Menu

Everyday Sources of Stress

- Pressure - the psychological experience produced by urgent demands or expectations for a person's behavior that come from an outside source.
- Uncontrollability - the degree of control that the person has over a particular event or situation. The less control a person has, the greater the degree of stress.
- Frustration - the psychological experience produced by the blocking of a desired goal or fulfillment of a perceived need.
- Conflict - psychological experience of being pulled toward or drawn to two or more desires or goals, only one of which may be attained.

Menu

Everyday Sources of Stress

- Pressure - the psychological experience produced by urgent demands or expectations for a person's behavior that come from an outside source.
- Uncontrollability - the degree of control that the person has over a particular event or situation. The less control a person has, the greater the degree of stress.

Menu

Everyday Sources of Stress

- Frustration - the psychological experience produced by the blocking of a desired goal or fulfillment of a perceived need. Possible reactions:
  - Aggression - actions meant to harm or destroy.
  - Displaced aggression – taking out one's frustrations on some less threatening or more available target, a form of displacement.
  - Escape or withdrawal - leaving the presence of a stressor, either literally or by a psychological withdrawal into fantasy, drug abuse, or apathy.
- Conflict - psychological experience of being pulled toward or drawn to two or more desires or goals, only one of which may be attained.

Menu

Suicide

- Suicidal behavior is highly linked to depression.
- People who talk about suicide should be taken seriously and need help.

Menu

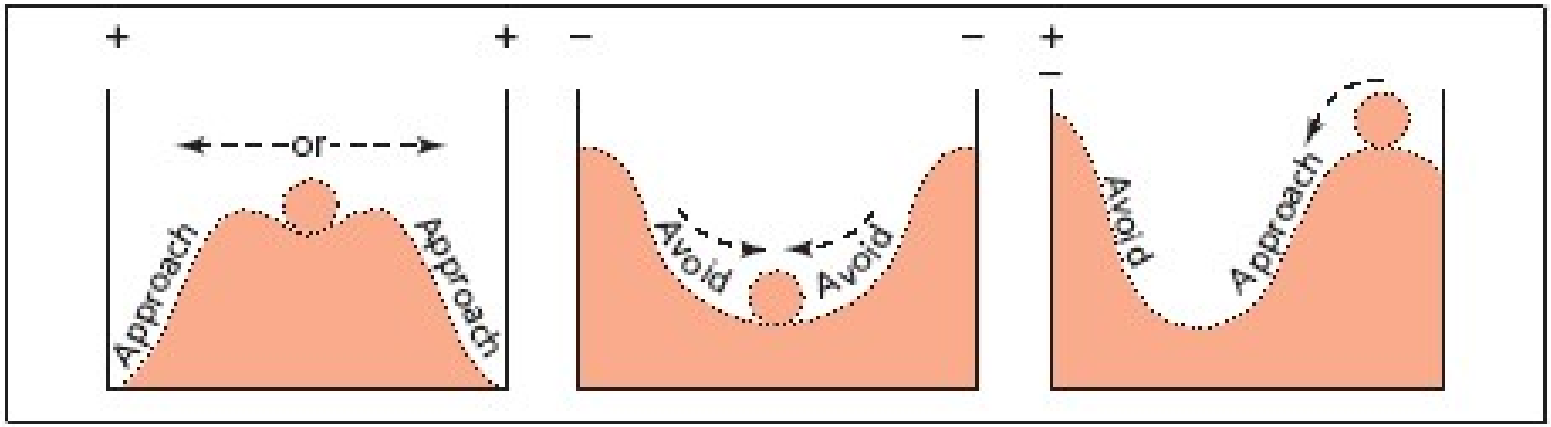
Types of Conflict

- Approach–approach conflict – conflict occurring when a person must choose between two desirable goals.
- Avoidance–avoidance conflict - conflict occurring when a person must choose between two undesirable goals.
- Approach–avoidance conflict - conflict occurring when a person must choose or not choose a goal that has both positive and negative aspects.
  - Double approach–avoidance conflict - conflict in which the person must decide between two goals, with each goal possessing both positive and negative aspects.
  - Multiple approach–avoidance conflict - conflict in which the person must decide between more than two goals, with each goal possessing both positive and negative aspects.

Menu

FIGURE 11.2 **Conflict diagrams** These diagrams represent three possible types of conflicts. In these diagrams, the ball represents the person who must make a decision. In an approach–approach conflict (first diagram), both goals (represented by the bottoms of the two hills) are equally desirable. Once one of these goals is chosen, the choice becomes very easy—it's all downhill. In an avoidance–avoidance conflict (the second diagram), both goals (tops of the two hills) are equally undesirable, but one must be chosen. Since movement toward either goal is an "uphill battle," people caught in these situations often delay making any kind of choice. In an approach–avoidance conflict (third diagram), the goal has both desirable and undesirable aspects. At first, the desirable aspects are most obvious, making it easy to "roll down the hill." But as the person gets closer to the goal (top of the hill), the undesirable aspects get stronger, making the goal harder to reach.

LO 11.6 Types of conflict



Menu

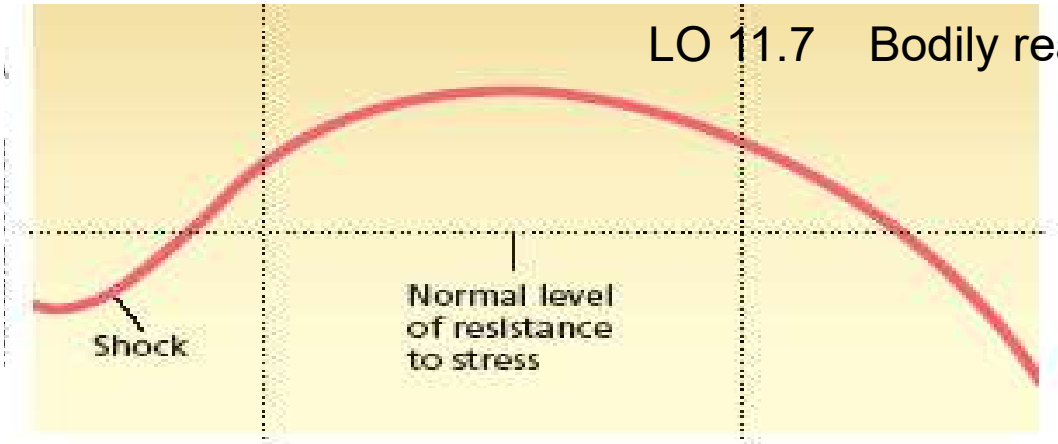
Bodily Reactions to Stress

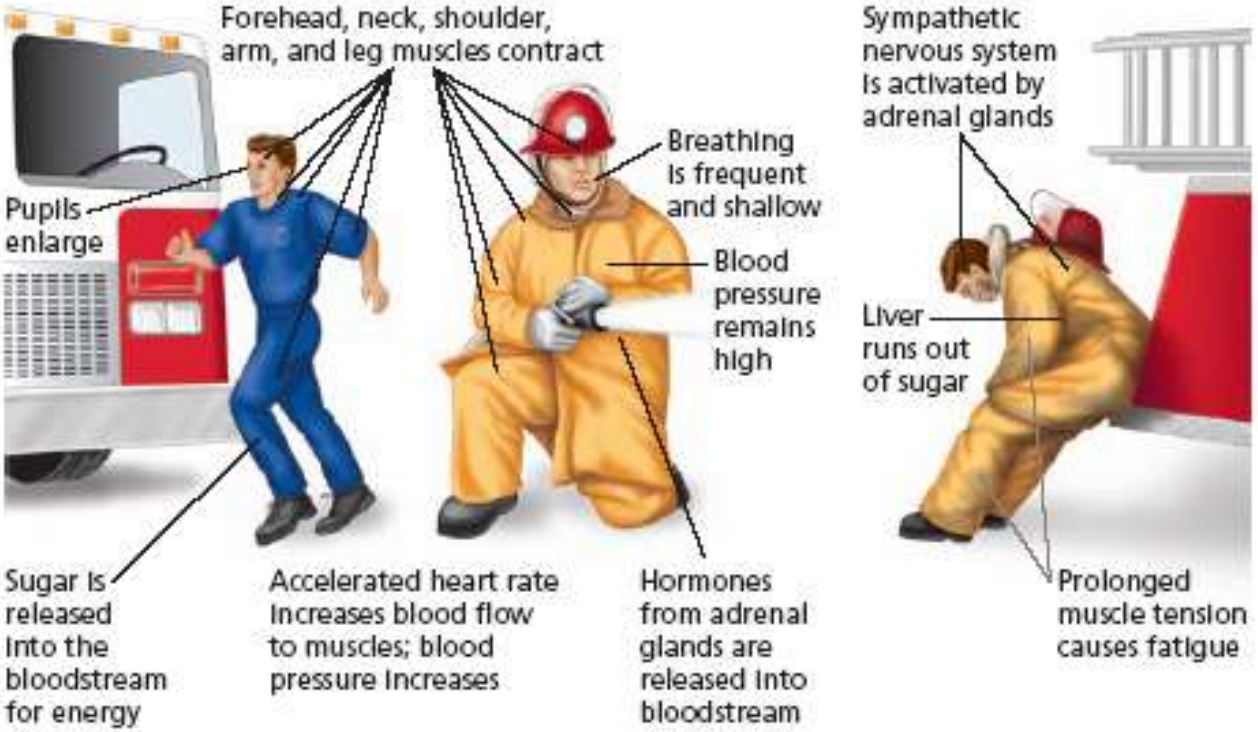
- Autonomic nervous system consists of:
  - Sympathetic system - responds to stressful events
  - Parasympathetic system - restores the body to normal functioning after the stress has ceased.
- General Adaptation Syndrome (GAS) - the three stages of the body's physiological reaction to stress, including alarm, resistance, and exhaustion.

Menu

LO 11.7 Bodily reactions to stress

FIGURE 11.3 **General Adaptation Syndrome** The diagram at the top shows some of the physical reactions to stress in each of the three stages of the general adaptation syndrome. The diagram at the bottom shows the relationship of each of the three stages to the individual's ability to resist a stressor. In the alarm phase, resistance rapidly increases as the body mobilizes its defense systems. In the resistance stage, the body is working at a much increased level of resistance, using resources until the stress ends or the resources run out. In the exhaustion stage, the body is no longer able to resist as resources have been depleted, and at this point disease and even death are possible.




Alarm Stage
Resistance Stage
Exhaustion Stage
Forehead, neck, shoulder, arm, and leg muscles contract
Pupils enlarge
Breathing is frequent and shallow
Blood pressure remains high
Sugar is released into the bloodstream for energy
Accelerated heart rate increases blood flow to muscles; blood pressure increases
Hormones from adrenal glands are released into bloodstream
Sympathetic nervous system is activated by adrenal glands
Liver runs out of sugar
Prolonged muscle tension causes fatigue

Menu

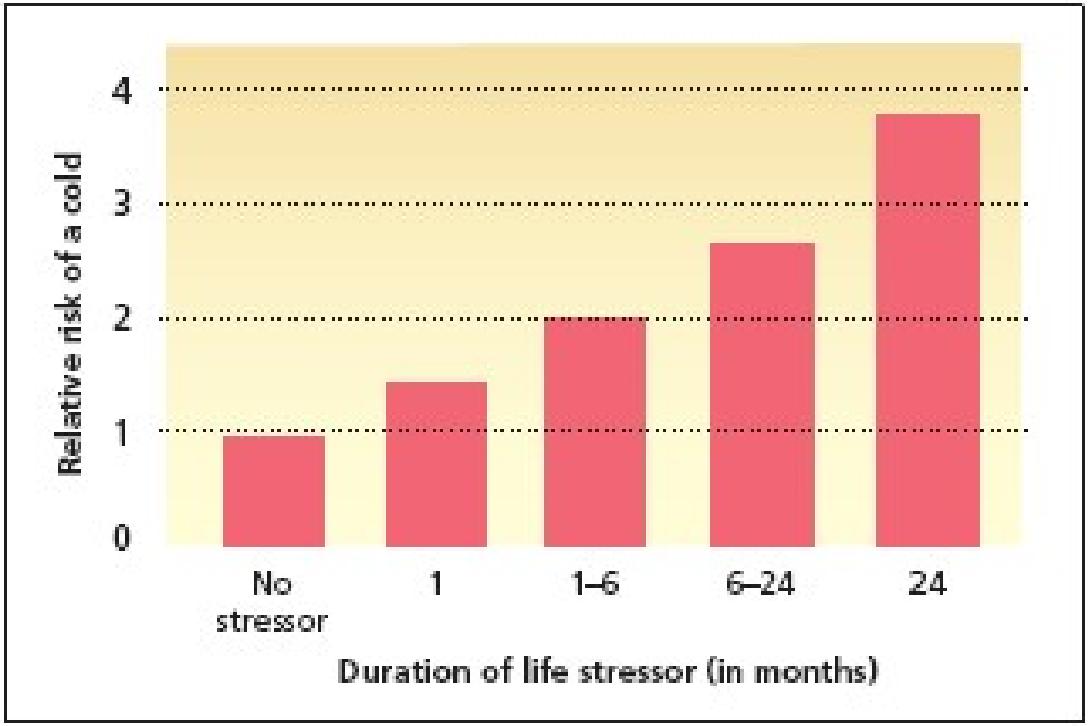
Stress and the Immune System

- Immune system - the system of cells, organs, and chemicals of the body that responds to attacks from diseases, infections, and injuries.
  - Negatively affected by stress.
- Psychoneuroimmunology - the study of the effects of psychological factors such as stress, emotions, thoughts, and behavior on the immune system.
- Natural killer cell - immune system cell responsible for suppressing viruses and destroying tumor cells.

Menu

FIGURE 11.4 **Stress Duration and Illness** In this graph, the risk of getting a cold virus increases greatly as the months of exposure to a stressor increase. While a stress reaction can be useful in its early phase, prolonged stress has a negative impact on the immune system, leaving the body vulnerable to illnesses such as a cold.
Source: Cohen et al., 1998.

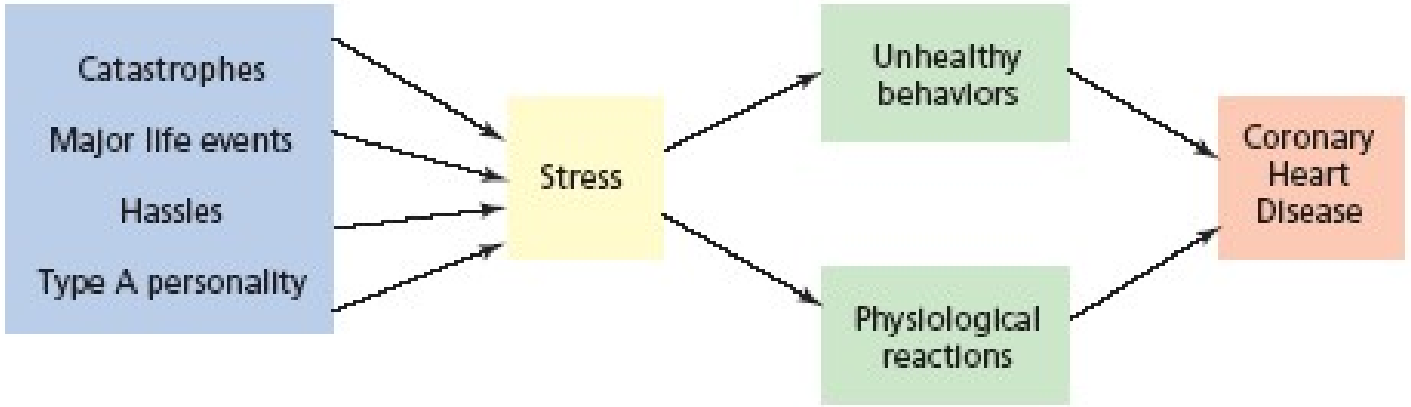
LO 11.8 Relationship between stress and the immune system



Menu

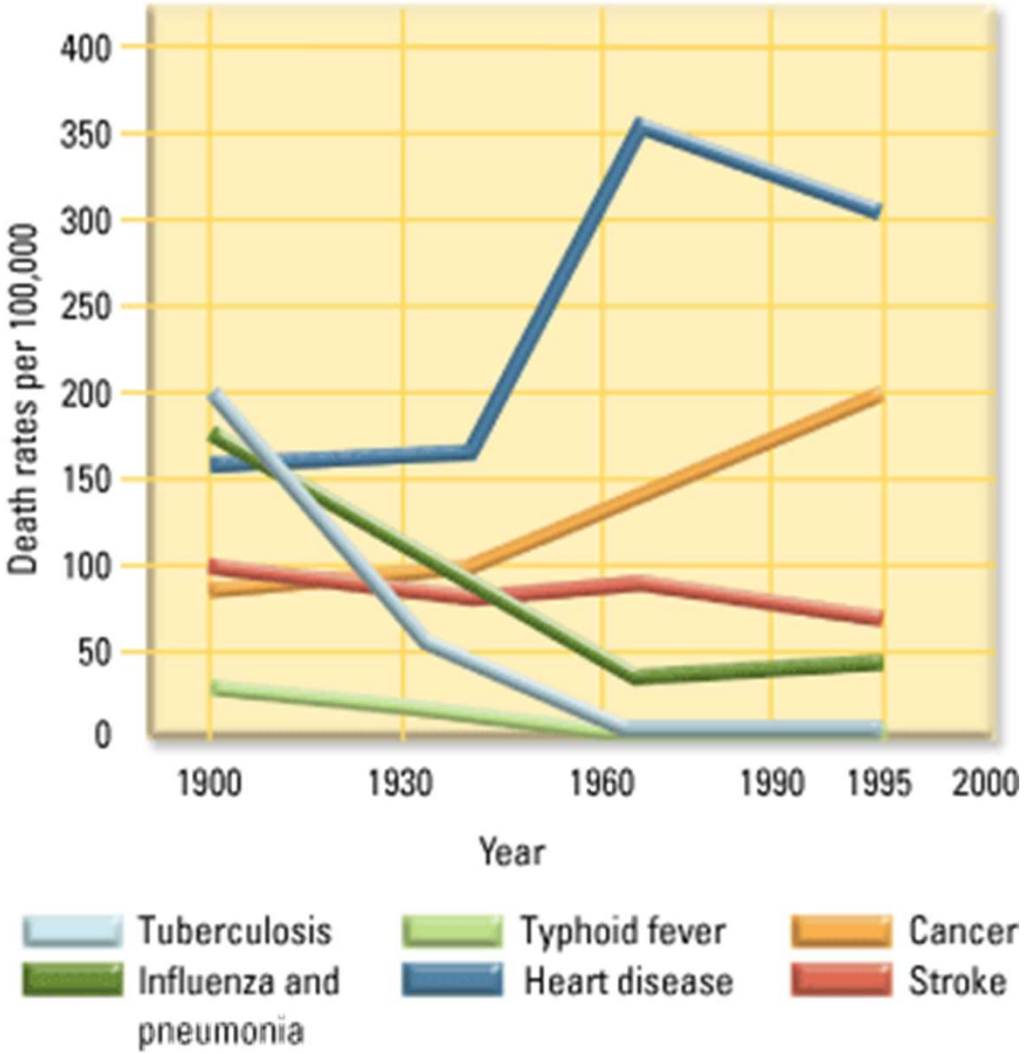
LO 11.8 Relationship between stress and the immune system

FIGURE 11.5 **Stress and Coronary Heart Disease** The box on the left represents various sources of stress (Type A personality refers to someone who is ambitious, always working, and usually hostile). In addition to the physical reactions that accompany the stress reaction, an individual under stress may be more likely to engage in unhealthy behavior such as overeating, drinking alcohol or taking other kinds of drugs, avoiding exercise, and acting out in anger or frustration. This kind of behavior also contributes to an increased risk of coronary heart disease.



Menu

LO 11.8 Relationship between stress and the immune system



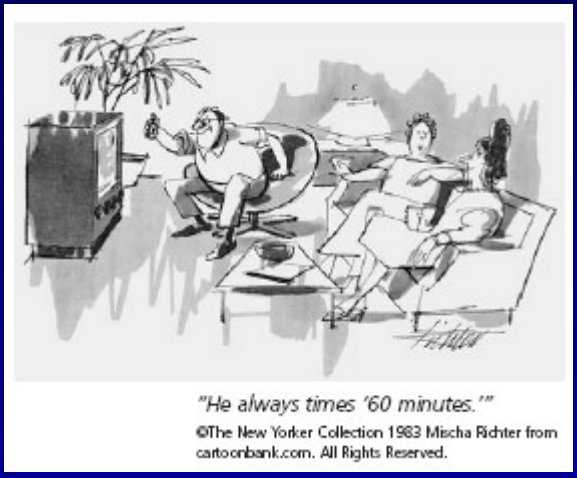
Menu

LO 11.8 Relationship between stress and the immune system

Menu

Stress and Personality

- Type A personality - person who is ambitious, time conscious, extremely hardworking, and tends to have high levels of hostility and anger as well as being easily annoyed.



"He always times '60 minutes.'"

©The New Yorker Collection 1983 Mischa Richter from cartoonbank.com. All Rights Reserved.

- Type B personality - person who is relaxed and laid-back, less driven and competitive than Type A, and slow to anger.

Menu

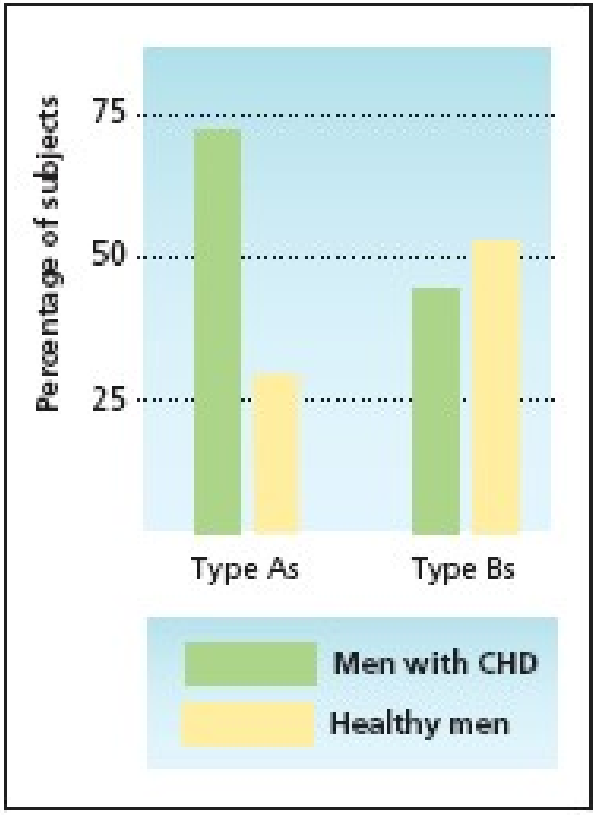
Stress and Personality

- Type C personality - pleasant but repressed person, who tends to internalize his or her anger and anxiety and who finds expressing emotions difficult.
- Hardy personality - a person who seems to thrive on stress but lacks the anger and hostility of the Type A personality.

Menu

FIGURE 11.6 **Personality and Coronary Heart Disease** The two bars on the left represent men with Type A personalities. Notice that within the Type A men, there are more than twice as many who suffer from coronary heart disease as those who are healthy. The two bars on the right represent men with Type B personalities. Far more Type B personalities are healthy than Type A personalities, and there are almost twice as many Type A personalities suffering from heart disease as Type B personalities.
Source: Miller et al., 1991.

LO 11.9 Relationship between stress and personality



Menu

Stress and Personality

- Optimists - people who expect positive outcomes.
- Pessimists - people who expect negative outcomes.

Menu

Stress and Social Factors

- Social factors increasing the effects of stress include poverty, stresses on the job or in the workplace, and entering a majority culture that is different from one's culture of origin
- Burnout - negative changes in thoughts, emotions, and behavior as a result of prolonged stress or frustration.

Menu

Stress and Social Factors

- Acculturative stress - stress resulting from the need to change and adapt a person's ways to the majority culture.
  - Four Methods of Acculturation:
  - Integration
  - Assimilation
  - Separation
  - Marginalization

- Social support system - the network of family, friends, neighbors, coworkers, and others who can offer support, comfort, or aid to a person in need.

Menu

Ways to Deal with Stress

- Coping strategies - actions that people can take to master, tolerate, reduce, or minimize the effects of stressors.
  - Problem-focused coping- coping strategies that try to eliminate the source of a stress or reduce its impact through direct actions.
  - Emotion-focused coping - coping strategies that change the impact of a stressor by changing the emotional reaction to the stressor.

Menu

Defense Mechanisms

- Psychological defense mechanisms - unconscious distortions of a person's perception of reality that reduce stress and anxiety.
- Denial - psychological defense mechanism in which the person refuses to acknowledge or recognize a threatening situation.
- Repression - psychological defense mechanism in which the person refuses to consciously remember a threatening or unacceptable event, instead pushing those events into the unconscious mind.

Menu

Defense Mechanisms

- Rationalization - psychological defense mechanism in which a person invents acceptable excuses for unacceptable behavior.
- Projection - psychological defense mechanism in which unacceptable or threatening impulses or feelings are seen as originating with someone else, usually the target of the impulses or feelings.

Menu

Defense Mechanisms

- Reaction formation - psychological defense mechanism in which a person forms an opposite emotional or behavioral reaction to the way he or she really feels to keep those true feelings hidden from self and others.
- Displacement - redirecting feelings from a threatening target to a less threatening one.
- Regression - psychological defense mechanism in which a person falls back on childlike patterns of responding in reaction to stressful situations.

Menu

Defense Mechanisms

- Identification - defense mechanism in which a person tries to become like someone else to deal with anxiety.
- Compensation (substitution) - defense mechanism in which a person makes up for inferiorities in one area by becoming superior in another area.
- Sublimation - channeling socially unacceptable impulses and urges into socially acceptable behavior.

Menu

TABLE 11.3 THE PSYCHOLOGICAL DEFENSE MECHANISMS

Defense Mechanism and Definition	Example
Denial: refusal to recognize or acknowledge a threatening situation.	Ben is an alcoholic who denies being an alcoholic.
Repression: "pushing" threatening or conflicting events or situations out of conscious memory.	Elise, who was sexually abused as a child, cannot remember the abuse at all.
Rationalization: making up acceptable excuses for unacceptable behavior.	"If I don't have breakfast, I can have that piece of cake later on without hurting my diet."
Projection: placing one's own unacceptable thoughts onto others, as if the thoughts belonged to them and not to oneself.	Keisha is attracted to her sister's husband but denies this and believes the husband is attracted to her.
Reaction formation: forming an emotional reaction or attitude that is the opposite of one's threatening or unacceptable actual thoughts.	Matt is unconsciously attracted to Ben but outwardly voices an extreme hatred of homosexuals.
Displacement: expressing feelings that would be threatening if directed at the real target onto a less threatening substitute target.	Sandra gets reprimanded by her boss and goes home to angrily pick a fight with her husband.
Regression: falling back on childlike patterns as a way of coping with stressful situations.	Four-year-old Jeff starts wetting his bed after his parents bring home a new baby.
Identification: trying to become like someone else to deal with one's anxiety.	Marie really admires Suzy, the most popular girl in school, and tries to copy her behavior and dress.
Compensation (substitution): when a person tries to make up for areas in which a lack is perceived by becoming superior in some other area.	Reggie is not good at athletics, so he puts all of his energies into becoming an academic scholar.
Sublimation: turning socially unacceptable urges into socially acceptable behavior.	Alain, who is very aggressive, becomes a professional hockey player.

LO 11.12
Psychological defense mechanisms

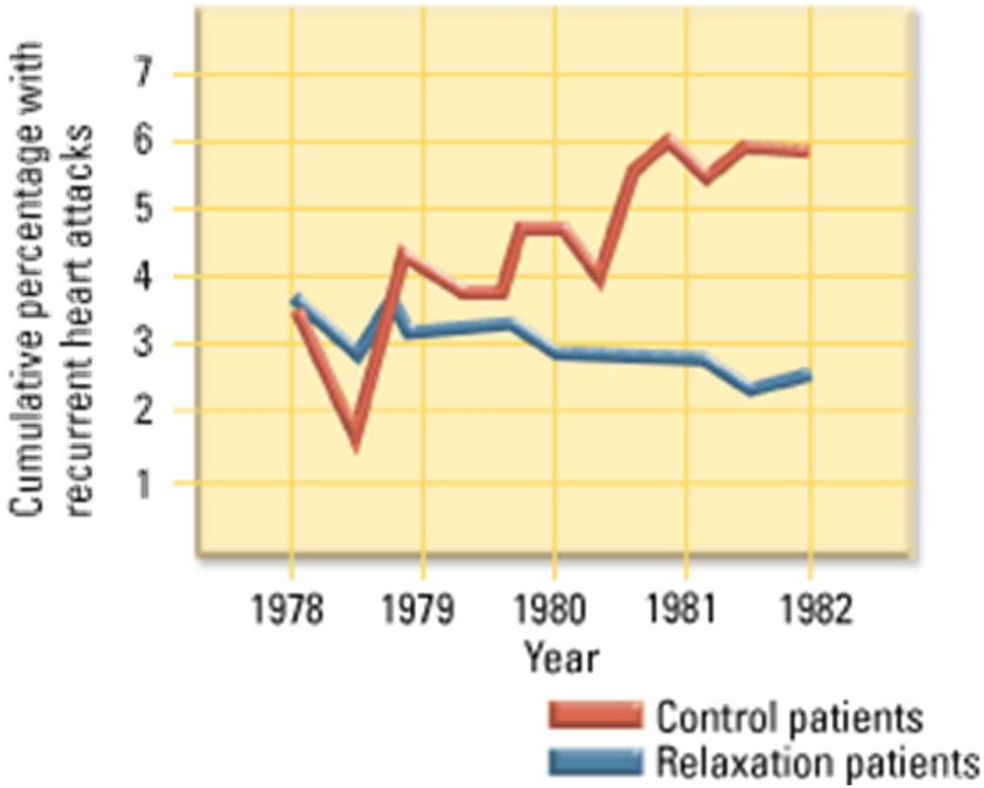
Menu

Meditation

- Meditation - mental series of exercises meant to refocus attention and achieve a trancelike state of consciousness.
- Concentrative meditation - form of meditation in which a person focuses the mind on some repetitive or unchanging stimulus so that the mind can be cleared of disturbing thoughts and the body can experience relaxation.
- Receptive meditation - form of meditation in which a person attempts to become aware of everything in immediate conscious experience, or an expansion of consciousness.

Menu

LO 11.13 Meditation to relieve stress



Menu

Cultural Influences on Stress

- Different cultures *perceive* stressors differently.
- *Coping strategies* will also vary from culture to culture.

Menu

Religiosity and Stress

- People with religious beliefs also have been found to cope better with stressful events.

Menu

Factors Promoting Wellness

- Exercise
- Social activities
- Getting enough sleep
- Eating healthy foods
- Having fun
- Managing one's time
- Practicing good coping skills

Menu